

Soil and Water Remediation, Groundwater/Vadose Zone (RL-0030)

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Overview

This section addresses work in Project Baseline Summary RL-0030, *Soil and Waste Remediation Groundwater/Vadose Zone*.

NOTE: Unless otherwise noted, all information contained herein is as of the end of November 2004.

Notable Accomplishments

Carbon Tetrachloride Dense, Non-aqueous Phase Liquid Investigation: In support of the carbon tetrachloride contamination cleanup in the 200 West Area, a subcontractor (Vista Engineering) initiated a passive soil vapor survey in the 216-Z-1A and Plutonium Finishing Plant areas on November 11, 2004. The data collection phase concluded on November 16, 2004. This data is the first of a series of field investigations that will include additional sampling in the vadose zone as well as non-intrusive investigations.

Well Drilling: By the end of November, drilling operations were being conducted consecutively at seven different locations. Five of the locations were groundwater monitoring wells, and two were soil characterization boreholes at highly contaminated liquid waste disposal sites. This is an unprecedented level of field activities which are being conducted with an excellent safety record (seven months of no Occupational Safety and Health Act-recordable accidents).

100 K Area Groundwater Cleanup: A proposal has been put forward to the Environmental Protection Agency (EPA) on an innovative test for cleaning up chromium contamination in groundwater in the 100 K Area. The treatment technology is new to the Hanford Site. It has been successfully demonstrated at other locations around the world. The plan is to extract contaminated groundwater from a well, treat it with a reactive chemical (calcium polysulfide) on the surface, and reinject the treated water into four wells that are equally spaced around the extraction well. As the pumping, treating, and reinjection process continues, the water flows from the injection wells back towards the extraction well. This creates a "cloverleaf" pattern of cleaned up water. The reactive chemical remains in the soil and any contaminated groundwater that flows through this cleaned up region is also remediated. EPA approves of the plan, and it will be implemented in mid-2005.

Anticipated FY 2005 Funds (\$M)

| | FY 2005 Anticipated Funding w/Carryover |
|--|--|
| Soil & Water Remediation, Groundwater/Vadose Zone | \$ 61.3 |

FY 2005 Schedule/Cost Performance (\$M)

| | Budgeted Cost of Work Scheduled | Budgeted Cost of Work Performed | Actual Cost of Work Performed | Schedule Variance \$ | Schedule Variance % | Cost Variance \$ | Cost Variance % | Budget At Completion |
|---|--|--|-------------------------------------|-------------------------|------------------------|---------------------|--------------------|-------------------------|
| Soil & Water Remediation, Groundwater/ Vadose Zone | \$7.2 | \$5.9 | \$6.2 | -\$1.2 | -17.3% | -\$0.2 | -4.2% | \$55.9 |

Numbers are rounded to the nearest \$M and include the closure services allocation.

Schedule Performance (-\$1.2M/-17.3%): Award of the jet-shot contract was delayed because of extensive security issues and nuclear hazard categorization analysis and implementation of FH safety plan requirements. The schedule will be recovered by sharing multiple crews at the various sites.

Cost Performance (-\$0.2M/-4.2%): The cost variance is within acceptable thresholds.

Performance Analysis FYTD and Monthly (\$M)

